

## ABSTRACT

A spreading system and method for CDMA applications that requires fewer integer multiplications. User data is spread using real or complex integer based spreading codes of length  $SF$  to  $SF_{max}$  chips. At least one of the codes is of the form  $j^n \cdot v[n]$  where  $v[n]$  is a spreading code. The invention provides increased user separation using a plurality of spreading codes.